Serial ATA PCI
Quick Installation Guide

Introducing the *Serial ATA PCI*

The *Serial ATA PCI* is an ultra high-speed dual channel Serial ATA controller board for use in Pentium-class computers. It achieves burst data transfer rates up to 150MB/s (1.5Gb/s) and supports various brand of hard disk drives with capacities greater that 137GB.

Features and Benefits

- Add up to two high-speed SATA hard drives
- New Serial ATA cable - easier to install & provides better air circulation
- Compliant with Serial ATA 1.0 specification
- Compliant with PCI 2.3 specification
- Supports data transfer rate up to 1.5Gb/s (150MB/s)
- Two independent bus master DMA channels with 256-byte FIFOs per channel for host reads and writes
- Breaks the 137GB barrier! Works with various brands of large capacity Serial ATA hard disk drives

System Requirements

- Pentium or equivalent PC with an available PCI slot
- Windows® 7 (32-/64-bit) / Vista (32-/64-bit) / XP (32-/64-bit) / Server 2003 & 2008 (32-/64-bit) / 2000 / NT 4.0 / ME / 98SE

Package Contents

- *Serial ATA PCI* adapter
- Serial ATA cable
- Serial ATA power cable
- Driver CD
- Quick installation guide

Board Layout

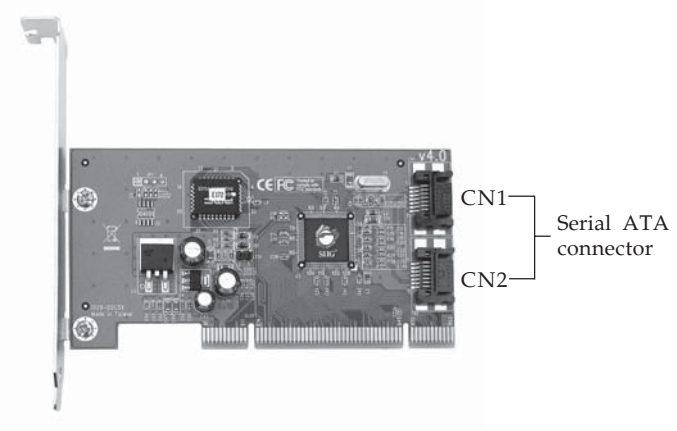

Figure 1. Serial ATA PCI Board Layout

Hardware Installation

General instructions for installing the card are provided below. Since the design of computer cases and motherboards vary, refer to your computer's reference manual for further information, if needed.

Static Electricity Discharge may permanently damage your system. Discharge any static electricity build up in your body by touching your computer case for a few seconds. Avoid any contact with internal parts and handle cards only by their external edges.

1. Turn OFF the power to your computer and any other connected peripheral devices.
2. Unplug the power cord from the back of the computer.
3. Remove the computer cover.
4. Remove the slot bracket from an available PCI slot.
5. To install the card, carefully align the card bus connector to the selected PCI slot on the motherboard. Push the board down firmly, but gently, until it is well seated.
6. Replace the slot bracket holding screw to secure the card.

Device Connection

The *Serial ATA PCI* is a dual channel Serial ATA controller that supports up to two Serial ATA hard disk drives. If you plan to use the second Serial ATA channel, you will need to purchase another Serial ATA cable.

1. Install hard disk drive(s) in chassis.
2. Connect the Serial ATA hard disk drive to the system power supply using the *Serial ATA power cable*.
3. Connect one end of the *Serial ATA cable* to the hard disk drive.

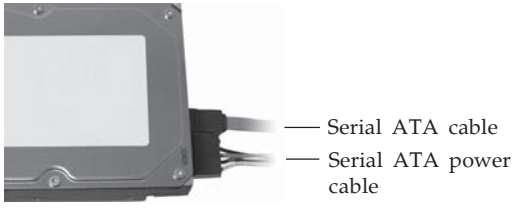

Figure 2: Hard disk drive connecrions

4. Attach the other end of the *Serial ATA cable* to the **Serial ATA connector** on the *Serial ATA PCI*.

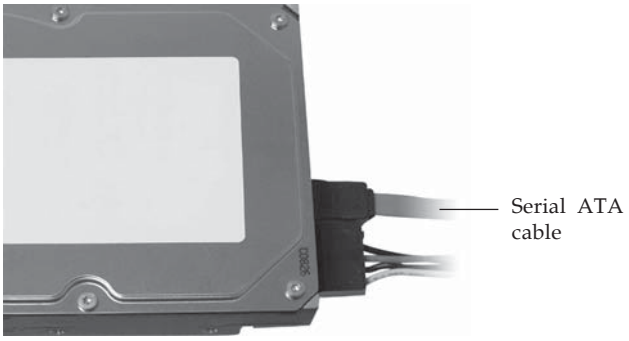

Figure 3. Connecting the Serial ATA cable

5. Follow the same instructions when connecting a second hard drive. Device connection is now complete.
6. Replace the computer cover and reconnect the power cord.

Driver Installation

This section provides information on how to install the *Serial ATA PCI* drivers.

Windows 7 (32-bit)

For New Windows 7 Installation

1. Install the board and follow Microsoft procedures to install Windows 7 accordingly.
2. At the **Where do you want to install Windows?** screen, click **Load Driver**.
3. Insert the driver CD, then click **Browse**.
4. Double click **CD Drive...Drivers**, double click **Win7** folder, select **32bit**, click **OK**.
5. Click **Next**.

6. At **Where do you want to install Windows?**, re-insert the Windows Installation disk, wait several seconds, then follow the on-screen instructions to complete Windows 7 installation.

For Existing Windows 7 Installation

1. Install the board and boot up Windows, when the message **Device driver software not successfully installed** appears on the taskbar by the system clock, insert the driver CD.
2. Right click **Computer**, click **Manage**, click **Device Manager**.
3. Right click **Serial ATA Controller**, click **Update Driver software**.
4. Click **Browse my computer for driver software**.
5. Type **D:\Win7\32bit**, then click **Next**. (Change **D:** to match your CD/DVD-ROM drive letter)
6. At Windows has successfully updated your driver software, click **Close**.

Windows 7 (64-bit)

For New Windows 7 (64-bit) Installation

1. Install the board and follow Microsoft procedures to install Windows 7 accordingly.
2. At the **Where do you want to install Windows?** screen, click **Load Driver**.
3. Insert the driver CD, then click **Browse**.
4. Double click **CD Drive...Drivers**, double click **Win7**, double click **64bit**,.

   For non-Itanium processors: Select **AMD64**, then click **OK**.

For Itanium processors: Select IA64, then click OK

5. Click **Next**.
6. At **Where do you want to install Windows?**, re-insert the Windows Installation disk, wait several seconds, then follow the on-screen instructions to complete Windows 7 installation.

For Existing Windows 7 (64-bit) Installation

1. Install the board and boot up Windows, when the message **Device driver software not successfully installed** appears on the taskbar by the system clock, insert the driver CD.
2. Right click **Computer**, click **Manage**.
3. Click **Device Manager**, right click **Serial ATA Controller**, click **Update Driver software**.
4. Click **Browse my computer for driver software**.
5. Type **D:\Win7\64bit**, then click **Next**. (Change **D:** to match your CD/DVD-ROM drive letter)
6. At Windows has successfully updated your driver software, click **Close**.

To Verify Windows 7 Installation

1. Right click **Computer** and click **Manage**, click **Device Manager**.
2. Double click **Storage controllers**, **Silicon Image SiI... Controller** should be displayed.

Windows Vista (32-bit)

For New Windows Vista Installation

1. Install the board and follow Microsoft procedures to install Windows Vista accordingly.
2. At the **Where do you want to install Windows?** screen, click **Load Driver**.

3. Insert the driver CD, then click **OK**.
4. Select **Silicon Image SiI... SATALink Controller...**, then click **Next**.
5. Follow the on-screen instructions to complete the Windows Vista installation.

For Existing Windows Vista Installation

1. At the **Found New Hardware Wizard**, click **Locate and install driver software (recommended)**.
2. Click **Continue**, insert the driver CD, click **Next**.
3. Click **Close** to complete the installation.

Windows Vista (64-bit)

For New Windows Vista (64-bit) Installation

1. Install the board and follow Microsoft procedures to install Windows accordingly.
2. At **Where do yo want to install Windows?** screen, click **Load Drivers**.
3. Insert the driver CD, click **Browse**.
4. Click on the **Plus (+)** sign next to the CD-ROM drive, then double click the **64bit** folder.
5. Highlight **AMD64** (for 64-bit extended processors) or **IA64** (for 64-bit Intel Itanium processors), then click **Ok**.
6. Select **Silicon Image... SATALink Controller**, then press **Next**.
7. Follow the on-screen instructions to complete the installation.

For Existing Windows Vista (64-bit) Installation

1. Install the board and boot up Windows.

2. At the **Found New Hardware Wizard**, select **Locate and install driver software (recommended)**, click **Continue**. Click **Don't search online**.
3. Insert the driver CD, click **Next**.
4. At The software for this device has been successfully installed, click **Close** to complete the installation.

To Verify Windows Vista Installation

1. Right click **My Computer** and click **Manage**.
2. Click **Continue**, click **Device Manager**.
3. Double click **Storage controllers**, **Silicon Image SiI... Controller** should be displayed.

Windows XP (32-bit) / Server 2003 (32-bit)

For New Windows XP / Server 2003 Installation

A new installation of Windows XP / Server 2003 requires a floppy disk for the driver installation. To make this floppy disk, copy the **contents** of the **Floppy** folder, found on the driver CD, onto a blank floppy disk then follow the directions below.

1. Install the board and follow Microsoft procedures to install Windows accordingly.
2. Restart your system if prompted by Windows installation.
3. At the **Windows Setup** screen, press **F6** to install the driver.
4. Insert the driver diskette. Press **S** then press **Enter**.
5. Select **Silicon Image SiI... Controller** and press **Enter**.
6. Press **Enter** to continue and follow the on-screen instructions to complete the installation.

For Existing Windows XP / Server 2003 Installation

1. Install the board and boot up Windows.
2. At the **Found New Hardware Wizard**:

   XP (w/SP1 or earlier) / Server 2003: Continue to step #3

   XP (w/SP2 or later) / Server 2003 (w/ SP1 or later): Select **No, not at this time**, then click **Next**.
3. Insert the driver CD, select **Install the software automatically (Recommended)**, and click **Next**.
4. Click **Finish** and restart Windows to complete the installation.

Windows XP (64-bit) / Server 2003 (64-bit)

For New XP (64-bit) / 2003 (64-bit) Installation

A new installation of Windows XP (64-bit) / Server 2003 (64-bit) requires a floppy disk for the driver installation. To make this floppy disk, copy the **contents** of the **64bit** folder, found on the driver CD, onto a blank floppy disk then follow the directions below.

1. Install the board and follow Microsoft procedures to install Windows accordingly.
2. Restart your system when prompted by Windows installation.
3. At the **Windows Setup** screen, press **F6** to install the driver.
4. Insert the floppy disk you made above. Press **S** then press **Enter**.
5. Select **Silicon Image SiI 3512...** that matches your system processor, then press **Enter**.
6. Press **Enter** to continue and follow the on-screen instructions to complete the installation.

For Existing XP (64-bit) / 2003 (64-bit) Installation

1. Install the board and boot up Windows.
2. At the **Found New Hardware Wizard**, select **No, not at this time**, then click **Next**.
3. Insert the driver CD, select **Install the software automatically (Recommended)**, and click **Next**.
4. Click **Finish** and restart Windows to complete the installation.

Windows 2000

For New Windows 2000 Installation

A new installation of Windows 2000 requires a floppy disk for the driver installation. To make this floppy disk, copy the **contents** of the **Floppy** folder, found on the driver CD, onto a blank floppy disk then follow the directions below.

1. Install the board and follow Microsoft procedures to install Windows 2000 accordingly.
2. Restart your system when prompted during Windows' installation.
3. At the **Windows 2000 Setup** screen, press **F6** to install the driver.
4. Insert the driver diskette. Press **S**, then press **Enter**.
5. Select **Silicon Image SiI... Controller** and press **Enter**.
6. Press **Enter** to continue and follow on-screen instructions to complete the installation.

For Existing Windows 2000 Installation

1. Install the board and boot up Windows 2000.
2. At the **Found New Hardware Wizard**, click **Next**.

3. Select **Search for a suitable driver for my device (recommended)** and click **Next**.
4. Insert the driver CD, check **CD-ROM drives**, uncheck the other boxes, and click **Next**. Click **Next** again to continue.
5. Click **Finish**, remove the driver CD and restart Windows to complete the installation.

To Verify Windows 2000/XP/2003 Installation

1. Right click **My Computer** and click **Manage**.
2. Select **Device Manager**.
3. Double click **SCSI and RAID Controllers**, **Silicon Image SiI 3512... Controller** should be displayed.

Windows Server 2008 (32-bit)

New Windows Server 2008 Installation

1. Install the board and follow Microsoft procedures to install Windows accordingly.
2. At **Where do you want to install Windows?**, click **Load Driver**.
3. Insert driver CD, then click **Browse**.
4. Click **CD Drive...Drivers**, then click **OK**.
5. Select **Silicon Image Sil 3512 SATALink Controller...**, then click **OK**
6. Follow on-screen instructions to complete Windows Server 2008 installation.

Existing Windows Server 2008 Installation

1. Install the board and boot up Windows.
2. At the **Found New Hardware Wizard**, select **Locate and install driver software (Recommended)**, then click **Don't search online.**

3. Insert the driver CD. The driver will install automatically.
4. Click **Close**.
5. Remove the driver CD and restart your Windows to complete the installation.

Windows Server 2008 (64-bit)

New Windows Server 2008 (64-bit) Installation

1. Install the board and follow Microsoft procedures to install Windows accordingly.
2. At **Where do you want to install Windows?**, click **Load Driver**.
3. Insert driver CD, then click **Browse**.
4. Double click **CD Drive (D:)**. (change D: to match your CD-ROM drive letter)
5. Double click **64bit** folder, highlight **AMD64** (for 64-bit extended processors) or **IA64** (for 64-bit Intel Itanium processors), then click **Ok**.
6. Select **Silicon Image Sil 3512 SATALink Controller...,** then click **Next.**
7. Follow on-screen instructions to complete Windows Server 2008 installation.

Existing Windows Server 2008 (64-bit) Installation

1. Install the board and boot up Windows.
2. At the **Found New Hardware Wizard**, insert the driver CD, select **Locate and install driver software (Recommended)**, then click **Next**.
3. The driver will install automatically.
4. Click **Close**.
5. Remove the driver CD and restart Windows to complete the installation.

Verify Server 2008 Installation

1. Right click **Computer,** click **Manage**, double click **Diagnostics**, click **Device Manager**.
2. Double click **Storage controllers**, **Silicon Image SiI... Controller** should be displayed.

Windows NT4.0

For New Windows NT4.0 Installation

A new installation of Windows NT4.0 requires a floppy disk for the driver installation. To make this floppy disk, copy the **contents** of the **NT4** folder, found on the driver CD, onto a blank floppy disk then follow the directions below.

1. Install the board and follow Microsoft procedures to install Windows NT4.0 accordingly.
2. At the **Windows NT Setup** screen, press **F6** to specify and add the driver.
3. Press **S**, select **Other**, then press **Enter**.
4. Insert the driver diskette then press **Enter**.
5. Select **Silicon Image... for Windows NT 4.0 and 2000** and press **Enter**.
6. Press **Enter** to continue, then follow the on-screen instructions to complete Windows NT4.0 installation.

For Existing Windows NT4.0 Installation

1. Install the board and boot up Windows NT4.0.
2. Double click **My Computer/Control Panel/SCSI Adapters**, then click the **Drivers** tab.
3. Click **Add...,** then click **Have Disk...**.

4. Insert the driver CD, type **D:\NT4**, then click **OK**. (Change **D:** to match the drive letter of your CD-ROM)
5. Highlight **Silicon Image** in the left column, then select **Silicon Image SiI... SATALink Controller**, and click **OK**.
6. Click **OK**, remove the driver CD and restart NT4.0 to complete the installation.

To Verify Windows NT4.0 Installation

1. Double click **My Computer/Control Panel/SCSI Adapters**.
2. Highlight **Silicon Image... Controller** from **SCSI Adapters** listing and click **Properties**. A message **This device is working properly** is displayed in the dialog box when the driver is correctly installed.

Windows ME

For New Windows ME Installation

1. Install the board and follow Microsoft procedures to install Windows ME accordingly.
2. Once Windows has been installed, right click **My Computer**, then click **Properties**. Select **Device Manager** tab.
3. Double click **PCI Mass Storage Controller** listed under **Other Devices**.
4. Select **Driver** tab, then click **Update Driver** button.
5. Insert the driver CD, select **Specify the location of the driver (Advanced)**, then click **Next**.
6. Check **Specify a location**, uncheck the other box, type **D:\ME**, click **Next**. (Change **D:** to match the drive letter of your CD-ROM)

7. Click **Next**, then click **Finish**. Remove the driver CD and restart Windows to complete the installation.

For Existing Windows ME Installation

1. Install the board and boot up Windows ME.
2. At the **Add New Hardware Wizard**, insert the driver CD.
3. Select **Specify the location of the driver (Advanced)**, then click **Next**.
4. Check **Specify a location**, uncheck the other box, type **D:\ME**, click **Next**. (Change **D:** to match the drive letter of your CD-ROM)
5. Click **Next**, then click **Finish**.
6. Remove the driver CD and restart Windows to complete the installation.

Windows 98SE

For New Windows 98SE Installation

1. Install the board and follow Microsoft procedures to install Windows 98SE accordingly.
2. Once Windows has been installed, right click **My Computer** and click **Properties**. Select **Device Manager** tab.
3. Double click **PCI Mass Storage Controller** listed under **Other Devices**.
4. Select **Driver** tab, then click **Update Driver** button.
5. Insert the driver CD and click **Next**.
6. Select **Search for a better driver...**, then click **Next**.
7. Check **Specify a location,** uncheck the other boxes, then click **Next**.
8. Click **Next**, then click **Finish**.

9. Remove the driver CD and restart Windows to complete the installation.

For Existing Windows 98SE Installation

1. Install the board and boot up Windows.
2. At the **Add New Hardware Wizard**, click **Next**.
3. Select **Search for the best driver for your device** and click **Next**.
4. Insert the driver CD, check **Specify a location**, uncheck the other boxes, type **D:\98SE**, then click **Next**. (Change **D:** to match the drive letter of your CD-ROM)
5. Click **Next**, then **Finish**.
6. Remove the driver CD and restart Windows to complete the installation.

To Verify Windows 98SE/ME Installation

1. Right-click **My Computer**, then click **Properties**. Select **Device Manager** tab.
2. Double click **SCSI controllers**, **Silicon Image SiI... Controller** should be listed.
3. Double click **Silicon Image SiI... Controller** and click **Properties**. A message *This device is working properly* is displayed in the dialog box when the driver is correctly installed.

Bios Configuration

The *Serial ATA PCI* **BIOS** will appear everytime your system starts up. If the bios doesn't show, please install your controller in another PCI slot. During this **(Post)** process, the bios will show up and indicate the devices attached to it.

Blank Page

Blank Page

Technical Support and Warranty

QUESTIONS? SIIG's **Online Support** has answers! Simply visit our web site at ***www.siig.com*** and click **Support**. Our online support database is updated daily with new drivers and solutions. Answers to your questions could be just a few clicks away. You can also submit questions online and a technical support analysts will promptly respond.

SIIG offers a lifetime manufacturer warranty with this product. Please see our web site for more warranty details. If you encounter any problems with this product, please follow the procedures below.

A) If it is within the store's return policy period, please return the product to the store where you purchased from.

B) If your purchase has passed the store's return policy period, please follow these steps to have the product repaired or replaced.

Step 1: Submit your RMA request.

Go to **www.siig.com**, click **Support**, then **RMA** to submit a request to SIIG RMA. Your RMA request will be processed, if the product is determined to be defective, an RMA number will be issued.

Step 2: After obtaining an RMA number, ship the product.

- Properly pack the product for shipping. All software, cable(s) and any other accessories that came with the original package must be included.
- Clearly write your RMA number on the top of the returned package. SIIG will refuse to accept any shipping package, and will not be responsible for a product returned without an RMA number posted on the outside of the shipping carton.
- You are responsible for the cost of shipping. Ship the product to the following address:

  SIIG, Inc.
  6078 Stewart Avenue
  Fremont, CA 94538-3152, USA
  RMA#: _____

- SIIG will ship the repaired or replaced product via Ground in the U.S. and International Economy outside of the U.S. at no cost to the customer.

About SIIG, Inc.

Founded in 1985, SIIG, Inc. is a leading manufacturer of IT connectivity solutions (including Serial ATA and Ultra ATA Controllers, FireWire, USB, and legacy I/O adapters) that bridge the connection between Desktop/ Notebook systems and external peripherals. SIIG continues to grow by adding A/V and Digital Signage connectivity solutions to our extensive portfolio. All centered around the distribution and switching of A/V signals over CAT5/6, these products include matrix switches, distribution amplifiers, extenders, converters, splitters, cabling, and more.

SIIG is the premier one-stop source of upgrades and is committed to providing high quality products while keeping economical and competitive prices. High-quality control standards are evident by one of the lowest defective return rates in the industry. Our products offer comprehensive user manuals, user-friendly features, and most products are backed by a lifetime warranty.

SIIG products can be found in many computer retail stores, mail order catalogs, and e-commerce sites in the Americas, as well as through major distributors, system integrators, and VARs.

PRODUCT NAME

Serial ATA PCI

FCC RULES: TESTED TO COMPLY WITH FCC PART 15, CLASS B OPERATING ENVIRONMENT: FOR HOME OR OFFICE USE

FCC COMPLIANCE STATEMENT:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

THE PARTY RESPONSIBLE FOR PRODUCT COMPLIANCE

SIIG, Inc.
6078 Stewart Avenue
Fremont, CA 94538-3152, USA
Phone: 510-657-8688

Serial ATA PCI is a trademark of SIIG, Inc. SIIG and the SIIG logo are registered trademarks of SIIG, Inc. Microsoft and Windows are registered trademarks of Microsoft Corporation. All other names used in this publication are for identification only and may be trademarks of their respective companies.

November, 2009 Copyright © 2009 by SIIG, Inc. All rights reserved.